

Experiment 5: Perform perform the Linear filtering using convolution in an image

AIM:

To Perform the Linear filtering using convolution in an image.

SOURCE CODE:

```
S = imread('balloons_noise.png');  
imshow(S);  
h = 1/25.*ones(5,5);  
S2 = imfilter(S,h);  
imshow(S2);
```

```
S = imread('text.png');  
imshow(S);  
S2 = imcomplement(S);  
imshow(S2);
```

```
h = imread('a.png');  
h2 = imcomplement(h);  
imshow(h2);
```

```
S3 = im2double(S2);  
h3 = im2double(h2);  
S4 = imfilter(S3,h3);  
S5 = imnorm(S4);  
imshow(S5);
```

```
a_loc = S5 > 0.9;  
[rows, cols] = find(a_loc);  
imshow(S);  
sz = size(S);  
plot(cols,sz(1)-rows,'r.');
```

OUTPUT:

RESULT:

We have successfully performed the Linear filtering using convolution in an image.